Some Tips for Preparing and Practicing a Chalk Talk

- Know your audience. You will be speaking to faculty and students in the Math Department who have a range of specialties and interests. Design your talk so that anyone in the department—not just your advisor or a classmate doing similar work—can understand and be engaged by it.

- Define terms and symbols. Use the same level of precision that you use in your paper but make sure that everyone in your audience understands your terminology.

- Plan how to use the board space. Your talk will rely on figures and other visual information that you draw on the board. Consider how to present this information economically and effectively. If you plan to refer to a specific figure more than once, think about where to place it on the board for easy reference.

- Keep it lean. Your talk is a highly distilled version of your project, and you will have time to convey only its essential elements.

- Tell a story. Even though your talk is lean, it still needs to tell a coherent and compelling story about your work. Pay attention to plot and sequence and give your talk a narrative arc.

- Have an endpoint in mind. Plan where you want to end up, and then figure out what elements you must include so that you and your audience reach that endpoint. Aim to state one of your main results in order to give the audience a sense of the depth of your project.

- Address your audience. Although you will be referring to the chalkboard, don’t stand with your back to your audience except when you are actively writing on it. Speak directly to your audience, make eye contact, and make sure audience members can see the board clearly.

- Anticipate questions. Think about the kinds of questions you might be asked and practice responding to them. When someone asks a question about your research, first make sure you understand the question. Do you need to ask the person to clarify the question? Then assess whether you can answer effectively. If you don’t know the answer, say so. A difficult question may help you to further clarify and refine your research. You can thank your interlocutor for a good question and say that you’ll think further about it.
• Practice, practice, practice. Practice every element of your talk (writing on the board, delivering the talk, answering questions) and time each element carefully. With practice, you will gain confidence and you will see more clearly what is essential to your talk and what is not. Remember to leave time for questions both during and after the talk.

• Get excited about your presentation. If you find your research compelling and you enjoy talking about it (even if you’re nervous), others will want to listen.

Acknowledgements: Thanks to Elizabeth Milićević and Lynne Butler, Dept. of Mathematics and Statistics, Haverford College, for their advice regarding effective chalk talks.